IN THE CLAIMS:

Please cancel Claims 31 and 38, and amend Claims 27, 30, 32, 34, 37, 39 and 41 as follows. The claims, as pending in the subject application read as follows:

1. to 26. (Cancelled)

27. (Currently Amended) A device for sharing and controlling access to at least one peripheral for a computer system which includes a central processing unit and the at least one peripheral which has a physical interface to the central processing unit, the device comprising:

request reception means for receiving a request for access at an address of a virtual interface, wherein the address of the virtual interface corresponds to the physical interface;

data reception means for receiving data to be exchanged between the central processing unit and the at least one peripheral; and

modification means for modifying the data received by said data reception means, according to at least one ~~predetermined criterion corresponding to~~ filtering pattern selected in accordance with the address of the virtual interface.

28. (Previously Presented) A device according to Claim 27, further comprising:

a memory space reserved for the physical interface, wherein said memory space is peculiar to an application executed by the computer system; and

linking means for linking an address of the memory space to an address of the physical interface.

29. (Previously Presented) A device according to Claim 27, further comprising:

a first interface with a bus connected to the central processing unit; and a second interface with a bus connected to the at least one peripheral.

30. (Currently Amended) A device according to Claim 27, wherein said modification means further comprises filtering means for filtering the received request for access, according to the at least one filtering pattern ~~predetermined criterion~~.

31. (Cancelled)

32. (Currently Amended) A device according to Claim [[31]] 27, wherein said modification means further comprises a filter for applying the filter pattern ~~selected by said address decoder~~ to the data received by said data reception means~~, wherein said selected filter pattern comprises the at least one predetermined criterion~~.

33. (Previously Presented) A device according to Claim 27, further comprising transmission means for transmitting the data modified by said modification means to the physical interface if an application requests an access in a write mode, and for

transmitting the data modified by said modification means to the central processing unit if the application requests the access in a read mode.

34. (Currently Amended) A method for sharing and controlling access to at least one peripheral for a computer system which includes a central processing unit and the at least one peripheral which has a physical interface to the central processing unit, the method comprising:

a request reception step of receiving a request for access at an address of a virtual interface, wherein the address of the virtual interface corresponds to the physical interface;

a data reception step of receiving data to be exchanged between the central processing unit and the at least one peripheral; and

a modification step of modifying the data received in said data reception step, according to at least one ~~predetermined criterion corresponding to~~ filtering pattern selected in accordance with the virtual interface.

35. (Previously Presented) A method according to Claim 34, further comprising:

a linking step of linking an address of a memory space to an address of the physical interface, wherein the memory space is reserved for the physical interface, and wherein the memory space is peculiar to an application executed by the computer system.

36. (Previously Presented) A method according to Claim 34, wherein the central processing unit is connected with a bus at a first interface, and wherein the at least one peripheral is connected to the bus at a second interface.

37. (Currently Amended) A method according to Claim 34, wherein said modification step further comprises a filtering step of filtering the received request for access, according to the at least one filtering pattern ~~predetermined criterion~~.

38. (Cancelled)

39. (Currently Amended) A method according to Claim [[38]] 34, wherein said modification step further comprises a filtering step of applying the filter pattern ~~selected in said address decoding step~~ to the data received by said data reception ~~step, wherein said selected filter pattern comprises the at least one predetermined criterion~~.

40. (Previously Presented) A method according to Claim 34, further comprising a transmission step of transmitting the data modified in said modification step to the physical interface if an application requests an access in a write mode, and of transmitting the data modified in said modification step to the central processing unit if the application requests the access in a read mode.

41. (Currently Amended) Computer-executable program code stored on a computer readable medium, said computer-executable program code for sharing and controlling access to at least one peripheral for a computer system which includes a central processing unit and the at least one peripheral which has a physical interface to the central processing unit, the computer-executable program code comprising:

code for performing the step of receiving a request for access at an address of a virtual interface, wherein the address of the virtual interface corresponds to the physical interface;

code for performing the step of receiving data to be exchanged between the central processing unit and the at least one peripheral; and

code for performing the step of modifying the data received in said data reception step, according to at least one ~~predetermined criterion corresponding to~~ filtering pattern selected in accordance with the virtual interface.